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EXAMINER
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/759,498  
Filing Date: January 12, 2001  
Appellant(s): BARNETT ET AL.

Jeanne E. Longmuir (Reg. No. 33,133)  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 7, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,974,412	Hazlehurst et al.	10-1999
5,933,822	Braden-Harder et al.	8-1999
5,991,751	Rivette et al.	11-1999

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**Claim 139 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,974,412 issued to Brian L. Hazlehurst et al (hereinafter "Hazlehurst") in view of USPN 5,933,822 issued to Lisa Braden-Harder et al (hereinafter "Braden-Harder").**

Regarding claims 139, Hazlehurst teaches a computerized tool for facilitating forward looking strategic analyses of a collection of technical documents each having a searchable text and associated bibliographic information including a source and a date, comprising the computer-assisted steps:

performing a first search to identify a subset (second collection) of documents focused on a particular field (see column 10, lines 22 – 57),

identifying those documents in the subset relevant to each of "m" "actions" (see column 2, lines 25 – 38);

identifying those documents in the subset relevant to each of "n" "objects" (see column 2, lines 48 – 56);

combining each of the "m" actions with each of the "n" objects to construct an "m" x "n" array of "cells", such that each of the cells is associated only with the documents in said subset that were identified as relevant both to the respective action and to the respective object (see column 11, lines 66 – 67 and column 12, lines 1 – 65); and

generating a graph showing each of the applied scoring metrics for each of the array cells (see column 22, lines 5 – 27).

Hazlehurst does not explicitly teach applying at least two scoring metrics to the bibliographic data for the documents associated with each of the cells, at least one of the scoring metrics including a time weighted predictive factor.

Braden-Harder teaches applying at least two scoring metrics to the bibliographic data for the documents associated with each of the cells, at least one of the scoring metrics including a time weighted predictive factor (see column 1, lines 17 – 22 and column 18, lines 8 – 24).

It would have been obvious to one of ordinary skill in the art at the time the was made to combine teaching of Braden-Harder with the teaching of Hazlehurst wherein scoring metrics to the bibliographic data for the documents associated with each of the cells is used for graphically depicting the weight, scoring, ranking and selection processes of documents. The motivation is that the scoring metrics enables the statistical search engine to rank the documents presented to the user according to the weight.

**Claims 140 - 158 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hazlehurst in view of Braden-Harder and further in view of USPN 5,991,751 issued to Kevin G. Rivette et al (hereinafter "Rivette").**

Regarding claims 140, Hazlehurst or Braden-Harder does not explicitly teach the actions and objects include specific instances of categories selected from the group consisting essentially of products, services, production methods, production applications, technologies, technological applications, chemical compounds, chemical indications, inventors, assignees, forward citations to a key reference, backward citations to a key reference, and combinations thereof.

Rivette teaches the actions and objects include specific instances of categories selected from the group consisting essentially of products, services, production methods, production applications, technologies, technological applications, chemical compounds, chemical indications, inventors, assignees, forward citations to a key reference, backward citations to a key reference, and combinations thereof (see column 17, lines 55 – 67 and column 85, lines 52 – 67).

It would have been obvious to one of ordinary skill in the art at the time the was made to combine teaching of Rivette with the teaching of Hazlehurst and Braden-Harder wherein the actions and objects which include specific instances of categories are used in analyzing patents. The motivation is that patent citation identifies source patents and citing patents for reference purposes.

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Regarding claim 141, Rivette teaches wherein the documents include both issued patents and not yet issued patent applications (see column 102, lines 56 – 67).

Regarding claim 142, Rivette teaches wherein the source information includes patent assignees (see column 17, lines 55 – 67).

Regarding claim 143, Rivette teaches wherein the date information includes a filing date (see column 17, lines 55 – 67).

Regarding claim 144, Rivette teaches wherein the date information also includes an issue date for the issued patents (see column 17, lines 55 – 67).

Regarding claim 145, Rivette teaches wherein one of the scoring metrics includes an innovation measure which takes into account changes of patent activity over time (see Fig. 66 and column 107, lines 24 – 48).

Regarding claim 146, Rivette teaches wherein one of the scoring metrics includes a recent innovation measure which takes into recently filed patent applications (see column 102, lines 61 – 65).



Regarding claim 147, Rivette teaches wherein one of the scoring metrics includes a measure of the relative position of a particular assignee within a particular cell (see Figs. 118 and 122).

Regarding claim 148, Rivette teaches wherein each scoring metric is focused on a different assignee (see column 11, lines 15 – 32).

Regarding claim 149, Rivette teaches wherein the graph is a spider graph showing each assignee's score for a predetermined number of key cells overlaid over the corresponding scores for at least two other assignees (see Figs. 61 – 65 and column 87, lines 47 – 63).

Regarding claim 150, Rivette teaches wherein the graph displays a visual quantitative comparison for each scoring metric (see column 94, lines 53 – 55).

Regarding claim 151, Rivette teaches wherein some of the cells are grouped into "clusters", and a combined scoring metric is displayed for each cluster (see column 54, lines 31 – 49).

Regarding claim 152, Rivette teaches wherein the bibliographic source information includes the name of a subject person, organization, or event (see column 27, lines 14 – 32).

Regarding claim 153, Rivette teaches wherein the date bibliographic information includes a publication date (see column 61, lines 32 – 43).

Regarding claim 154, Rivette teaches wherein the time weighted predictive factor is based at least in part on a publication, creation, or issue date (see column 16, lines 18 – 67 and column 17, lines 1 – 67).

Regarding claim 155, Rivette teaches wherein one of the scoring metrics includes a concentration or frequency measure which takes into account distribution of the selected documents among their respective sources (see column 30, lines 60 – 65).

Regarding claim 156, Rivette teaches wherein one of the scoring metrics includes a composite measure of dominance, innovation, and predictive innovation (Rivette discloses “dominance” as shown in Figs. 68 and 75; “innovation” as shown in column 102, lines 61 – 65 and “predictive innovation” as shown in column 1, lines 50 – 52).

Regarding claim 157, Rivette teaches wherein the actions and objects are crossed with a third dimension to form a three dimensional matrix (see column 25, lines 65 – 67; column 26, lines 1 – 5 and column 27, lines 51 – 67).

Regarding claim 158, Rivette teaches wherein the graph is a bar graph with each bar showing a particular scoring metric applied to a particular cell (see column 94, lines 60 – 65).

**(10) Response to Argument**

**A. Response to Appellant's Argument regarding claim 139 stands rejected under 35 U.S.C. § 103(a).**

**(1) *Neither the Hazlehurst nor Braden-Harder references provide an analysis tool resulting in a combined matrix of cells, with each cell associated with document in the subset identified as relevant to both respective “m” action and to the respective “n” object of the search conducted (page 6, paragraph 3).***

Examiner respectfully disagrees with the applicant. Firstly examiner submits that “m” actions and “n” objects are baseless and irrelevant to this argument. Examiner interprets these are merely search terms. As disclose and shown by Specification on page 11, lines 18 – 21, “action” are search terms along an y-axis and “object” are search term along a y-axis. “Action” and “object” are for identification and have no significance beyond terminology.

Secondly, examiner submits that the contention of the applicant that “neither the Hazlehurst nor Braden-Harder references provide an analysis tool resulting in a combined matrix of cells, with each cell associated with document in the subset

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identified as relevant to both respective “m” action and to the respective “n” object of the search conducted” is false and erroneous. According to Merriam Webster Collegiate Dictionary, Tenth Edition hereinafter “Dictionary” page 717 defines “Matrix” as **a rectangular array of mathematical elements that can be combined to form sums and products with similar arrays having an appropriate numbers of rows and columns**. Hazlehurst discloses array of cells containing rows and columns in “Goodness Table” as shown in Fig. 11. The Examiner interprets this TABLE as “Matrix”. Hazlehurst further discloses at column 2, lines 25 - 29 “collators” that attract and deliver relevant information to users. “Thus, not only are there multiple information **spaces**, but these are competing ways of representing the universe of information elements”.

Hazlehurst explains at column 10, lines 22 - 25 that collator is an object that represents real-world objects. Hazlehurst further discloses at column 11, line 66 – column 12 that table 134A contains rows and columns. It should be noted that Examiner interprets “information space” disclosed by Hazlehurst as “m” actions and “n” objects. This is supported by “Dictionary” on page 1125 that defines “**space**” as **three dimensional extent in which objects and events occur and have relative position and direction; and Claim 157 as claimed by applicant also supports this contention**. To summarize the above, Hazlehurst discloses “m” actions and “n” objects and combining “m” actions and “n” objects to construct array of cells as explained through Fig. 11, Table 134A and “multiple information space”. Therefore, as explained above and the rejection of claim 139 as declared in **section (9) Grounds of Rejection** above which is

applicable herewith, the combination of Hazlehurst and Braden-Harder clearly suggests applicant claimed invention.

**(2) The “document table” described by Hazlehurst beginning at col.11, line 66 is not the matrix of actions and objects recited in claim 139 (page 7, paragraph 1).**

Examiner respectfully disagrees with the applicant. As shown in response to argument 1 above; examiner submits that “Action” and “Object” are for identification and have no significance beyond terminology. However, Hazlehurst discloses array of cells containing rows and columns in “Goodness Table” as shown in Fig. 11 that have actions and objects. The Examiner interprets this TABLE as “Matrix”. Hazlehurst further discloses at column 2, lines 25 - 29 “collators” that attract and deliver relevant information to users. “Thus, not only are there multiple information **spaces**, but these are competing ways of representing the universe of information elements”. Hazlehurst explains at column 10, lines 22 - 25 that collator is an object that represents real-world objects. Hazlehurst further discloses at column 11, line 66 – column 12 that table 134A contains rows and columns. It should be noted that Examiner interprets “information space” disclosed by Hazlehurst as “m” actions and “n” objects. This is supported by “Dictionary” on page 1125 that defines “**space**” as **three dimensional extent in which objects and events occur and have relative position and direction; and Claim 157 as claimed by applicant also supports this contention.**

**(3) *Nothing in the Hazlehurst disclosure provides for the use of the desired “m” actions and “n” objects recited in claim 139 (page 7, paragraph 1).***

Examiner respectfully disagrees with the applicant. Please refer to response to arguments (1), (2) and the rejection of claim 139 as declared in **section (9) Grounds of Rejection** above which is applicable herewith. Examiner submits that “Action” and “Object” are for identification and have no significance beyond terminology. However, Hazlehurst discloses array of cells containing rows and columns in “Goodness Table” as shown in Fig. 11 that have actions and objects.

**(4) *Hazlehurst reference does not provide the recited use of scoring metrics, where at least one of the metrics is a time weighted factor (page 7, paragraph 2).***

Examiner respectfully disagrees with the applicant. Please refer to the rejection of claim 139 as declared in **section (9) Grounds of Rejection** above that is applicable herewith. The combination of Hazlehurst and Braden-Harder clearly suggests applicant claimed invention. Braden-Harder discloses scoring metrics, where at least one of the metrics is a time weighted factor as shown on column 18, lines 8 – 24. Examiner submits that the applicants agree with the examiner that Braden-Harder discloses “a variety of relative weighting factors” page 8, paragraph 1 of arguments. However examiner disagrees with the applicants that this weighting factor is not time related. To clarify this, examiner declares that in claim 154, applicants claim “wherein the time weighted predictive factor is based at least in part on a publication, creation, or issue

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data. However, the rejection of claim 154 as declared in **section (9) Grounds of Rejection** above that is applicable herewith and column 17, lines 55 – 66, Rivette et al disclose bibliographic data the include information such as publication, creation, issue data and expiration date. Therefore, the combination of Hazlehurst, Braden-Harder and Rivette clearly suggests applicant claimed invention of “time weighted factor”.

**(5) Braden-Harder reference likewise fails to teach or disclose providing a time weighted predictive factor (page 7, paragraph 3).**

Examiner respectfully disagrees with the applicants. Please refer to the rejection of claims 139, 154 as declared in **section (9) Grounds of Rejection** and response to argument (4) above that are applicable herewith.

**(6) None of the Braden-Harder weighting factors appear related to the use of the bibliographic data from the document associated with each of the cell in the array; and Braden-Harder does not present a time weighted factor as one of the disclosed scoring metric (page 8, paragraph 2).**

Examiner respectfully disagrees with the applicants. Please refer to the rejection of claims 139, 154 as declared in **section (9) Grounds of Rejection** and response to argument (4) above that are applicable herewith.

**B. Response to Appellant's Argument regarding claims 140 - 158 stands rejected under 35 U.S.C. § 103(a).**

**(7) *The rejection of claims 140 – 158 as obvious based upon the combination of Hazlehurst and Braden-Harder together with Rivette is in error and should be reversed (page 8, paragraph 4).***

Examiner respectfully disagrees with the applicant. As declared in **section (9) Grounds of Rejection** of all rejected claims and response to arguments of (A) 1- 6 of this section that are applicable herewith, Examiner submits that the rejection is proper and should be sustained.

**(8) *The arrangements may be bibliographic data, citation or concepts, but nothing about such arrangements provides the arrangement of rows and columns as objects and actions in the recited claims. Neither is it obvious from the disclosures of Hazlehurst or Braden-Harder that Applicants' actions and objects should be arranged in an array of "m" by "n" cells. Nor is there motivation from the hierarchical arrangement of the Rivette database search tool to arrange such actions and objects as a matrix (page 9, paragraph 2).***

Examiner respectfully disagrees with the applicant. Please refer response to arguments of (A) 1- 6 of this section that are applicable herewith which address the arguments regarding "objects and actions", "array of "m" by "n" cells" and matrix. Examiner submits that the claim limitations (claims 140 – 158) on which Rivette



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rejection is applied to do not explicitly include the arrangement of rows and columns as objects and actions, arranging actions and objects as array of "m" by "n" cells or matrix> However, examiner recognizes that claims 140 – 158 depend from independent claim 139; hence response to arguments of (A) 1- 6 of this section address this arguments. The motivation to combine the cited references is that Rivette automatically perform patent mapping, document mapping, patent citation, patent aging, patent bracketing/clustering, inventor patent count, inventor employment information and finance. The combination of Rivette with Hazlehurst and Braden-Harder will provide a system that helps individual or corporate entity make right decisions. The advantage is that the data and mapping provided by Rivette will enable this system to help a customer wishing to run individual reports to examine a particular aspect of its business, such as the remaining patent terms of patents that map to a particular product line; and run a combination of reports to analyze a larger part of its business, such as a strategic planning analysis to develop a patent strategy for a proposed future product; and also this system will help the customer perform an extensive and integrated examination of its business from a patent-centric and group-oriented point of view.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

Examiner Fred Ehichioya 

June 27, 2006

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